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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/525,523 | 02/24/2005 | Mutsuko Higo | Q86413 | 7037 |

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EXAMINER

NWAONICHA, CHUKWUMA O

ART UNIT PAPER NUMBER

1621

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/525,523 | | HIGO ET AL. | |
| | Examiner | | Art Unit | |
| | Chukwuma O. Nwaonicha | | 1621 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-14 are pending in the application.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

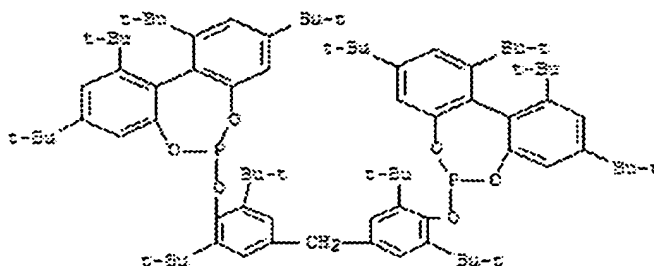
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Schieb et al., {DE 19630903}.

Schieb et al. disclose applicants' claimed compound and the process for making the compound. See compound in the abstract.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Spivack, {US 4,351,759}.

Spivack discloses applicants' claimed compound, composition, stabilizer and the process for making the compound. See compound shown below.



Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Haruna, {Aspects of Stabilization with Phosphorus in Polymers, Angewandte Makromolekulare Chemie, 1995, 232, 119-131}.

Haruna discloses applicants' claimed compound and the process for making the compound. See compound in the abstract.

Claims 1-2 and 5-14 are rejected under 35 U.S.C. 102(b) as being anticipated by ADEKA ARGUS CHEM CO LTD, {JP 58103537}.

ADEKA ARGUS CHEM CO LTD discloses applicants' claimed compound and the process for making the compound. See compound in the abstract.

Claims 1-2 and 5-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Haruna et al., {JP 07233283}.

Haruna et al. disclose applicants' claimed compound and the process for making the compound. See compound in the abstract.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Haruna et al., {EP 0 775 723 A1}.

Haruna et al. disclose applicants' claimed compound, composition, stabilizer and the process for making the compound.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by ADEKA ARGUS CHEM CO LTD, {JP 01121368}.

ADEKA ARGUS CHEM CO LTD discloses applicants' claimed compound, composition, stabilizer and the process for making the compound.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by YOSHITOMI PHARM IND KK, {JP 05331180}.

YOSHITOMI PHARM IND KK discloses applicants' claimed compound, composition, stabilizer and the process for making the compound.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spivack, {US 4,351,759} and Haruna et al., {EP 0 775 723 A1}.

Applicants' claim phosphorous ester compound, its composition, a stabilizer of the compound and the process for making the compound, wherein all the variables are as defined in the claims.

Determination of the scope and content of the prior art (M.P.E.P. §2141.01)

Spivack teach a phosphorous ester compound, its composition, stabilizer and the process for making the compound. See Detailed Disclosure in column 1-2, 4-5 and 9-20.

Haruna et al. teach a phosphorous ester compound, its composition, a stabilizer of the compound and the process for making the compound.

Ascertainment of the difference between the prior art and the claims (M.P.E.P.. §2141.02)

Spivack and Haruna et al. differ from the instant claims in that Spivack and Haruna et al. are silent about the metal salt that binds with an acid. Another difference between applicants claim invention and prior arts teaching is that the prior arts are silent about the use of amino alcohol.

Finding of prima facie obviousness--rational and motivation (M.P.E.P.. §2142-2143)

The instantly claimed phosphorous ester compound, its composition, a stabilizer of the compound and the process for making the compound would therefore have been suggested to one of ordinary skill because one wishing to obtain a phosphorous ester compound, its composition, a stabilizer of the compound and the process for making the compound is taught to select the compound and process of Spivack and Haruna et al.

One of ordinary skill in the art would have a reasonable expectation of success in practicing the instant invention by varying the variables of the genus of Spivack and Haruna et al. to arrive at the instantly claimed phosphorous ester compound, its composition, a stabilizer of the compound and the process for making the compound. Said person would have been motivated to practice the teaching of the references cited because they demonstrate that phosphorous ester compound are useful in industrial application. The instantly claimed invention would therefore have been obvious to one of ordinary skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Application/Control Number: 10/525,523

Page 7

Art Unit: 1621

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chukwuma O. Nwaonicha, Ph.D.

Patent Examiner

Art Unit: 1621

SIKARL A. WITHERSPOON
PATENT EXAMINER

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